Tundra Nenets

- Samoyed group, Finno-Ugrian (Uralic) family. ~ 25K speakers.
- Typologically synthetic, mostly agglutinative.
- Exclusively suffixing language, no non-concatenative processes
- Dominant morphological techniques: suffixation and final vowel modification

Phonology

- Purely phonological (independent of morphology) processes:
- Sandhi (assimilation). Some examples:
  - postvocalic obstruent weakening
    - p py t ty --> *b by d dy* / V _, e.g. *ya* 'earth' : poss. nom.sg3sg *ya**da*** (cf. *yam* 'sea' : *yam**ta***, *yar* 'side' : *yar**ta***);
  - preobstruental nazalization-
    - h --> *m n ng* / _ C[obstruent], e.g. *yah* 'soot' : poss. nom.sg3sg *ya**nt̄a*** : loc.sg *ya**ng**kəna*;
- Vowel Reduction

Morphophonology

Morphophonological processes – unlike ‘sandhi’, restricted to well-defined morphological environments:

- highly phonological:
  - Assimilation
  - Epenthesis
  - Truncation
- morphophonological modification
- lexically triggered processes:
  - (de)palatalization
  - alternations.

Morphophonological assimilation:

- Example: “neutralization”
- /m/ -> [w] / V_V
- ngum “grass”

abs nom pl	ngu**w**əq
abs acc pl	ngu**w**o
cf. abs dat sg	ngu**m**təh

Truncation

- Nenets only allows one consonant at the end of the syllable
  - *ngøm-* 'to eat' : nec. subj.3sg *ngømcu*
  - cf. *pya-* 'to begin' : *pyabcu*
  - but *ngombcu

Morphophonological modifications.

- Certain stem types and suffixes (e.g. mood suffixes) trigger modifications of the stem or suffix coda:
  - for approximative, change: a -> i
  - xatanaroxa -> xatanaroxi
  - kill to seem to kill

Things that matter:

- Morphological word class
- Stem Types:
  - consonant stem words. Some examples: m-stems, glottal stop stems, q-stems, h-stems
  - final vowel stems (includes glides, makes distinction between monosyllabic and polysyllabic vowel stems)

Verbal inflection

- Conjugation
  - Subjective, objective, reflexive
- Mood
  - 18 moods and submoods
- Tense
  - Aorist (sometimes called indefinite) and preterite

Conjugation

- Subjective (all verbs)
- Objective (all transitive Vs)
- Reflexive (only transitive-reflexive Vs)
- Need to consider:
  - person
  - number (sg, du, pl)
  - in the objective conjugation, number of the object.

Verbal conjugation

Conjugation	Num of obj	Morphological substem	Suffix set
Subjective		General finite stem	I
Objective	sg		II
	du	Dual obj stem	III
	pl	Special finite stem	
Reflexive			IV

Example: objective conjugation

- Person suffixation

Num of obj Person of Subj>	1	2	3
sg	m	r	**t**
du-pl	n	t	

- Number suffixation

Num of subj Person of Subj>	1	2	3
sg	ø		**(y)a**
du	yih		
pl	aq		(y)oh

- Suffixation: /xata/ >> /xata**t**/ >> /xatat**a**/
- After phonology: [xadada] “he killed it”

And now for some math...

- Each transitive reflexive verb has 900 finite forms: 20 mood and tense combinations * 5 conjugation and number of object combination * 3 persons * 3 numbers
- Each transitive verbs has 720 forms
- Each intransitive verb – 180 forms.

Small paradigm example

This is just the 1st person indicative aorist for a transitive-reflexive yempoq (to get dressed):

yempəq- 'to dress'

Subj	*yempəqngadəm*	I dressed smth
Obj. sg	*yempəqngaw*	I dressed it
Obj du	*yempəqngaxəyunə*	I dressed them (du)
Obj pl	*yempəqÿənə*	I dressed them
Refl	*yempəqÿəwəq*	I got dressed

Mood

- 18 moods and submoods.
- Indicative, imperative and optative have their own sets of suffixes.
- Other moods form special modal substems (through suffixes and vowel alternations) and use indicative suffixes.

Tense

- Aorist is unmarked
- Single suffix [syø] marks the preterite
  - occurs only with indicative, conjunctive, imperfective probabilitative and narrative moods

Verbal inflection template

Stem+Mood+Agr+Tense

Stem	Mood	Agr	T	Surface form	Mood	T	Conj	Agr	Gloss
xoni		tøm		xonidəm	ind	aor	subj	1 sg	I sleep
xoni		tøm	syø	xonidømcyə	ind	pret	subj	1 sg	I slept
xoni	yoyi	tøm	syø	xonyoyidømcyə	conj	pret	subj	1 sg	I would sleep
xoni	yoxø	tøm	----	xonyoxodəm	hort	----	subj	1 sg	Let me sleep

Step-by-step example

- Let's say "you guys seem to kill them".
- Preliminaries:
  - Lexical stem: /xata/ ("to kill")
  - Word class : [V]
  - Special lexical marking – none
  - Inflectional features:
    - Mood: imperfective approximative
    - Conjugation: objective
    - Person 2
    - Number pl – both for subj and obj

Steps 1-3: Modal stem formation and mood

- 1. Add variable suffix [n~ta].
  - {n~t} -> [n] / V__. OUTPUT: xatana
- 2. Add the suffix –roxa
  - OUTPUT: xatanaroxa
- 3. For approximative, change: a -> i
  - OUTPUT: xatanaroxi

Step 4: conjugation

- This is a transitive verb, so it needs to be in the objective conjugation. Add person suffix and number suffix:
  - OUTPUT: xatanaroxit (2nd person du/pl subj/plural obj)
  - OUTPUT: xatanaroxitaq (2nd person plural subj)
- Underlying phonological representation /xatanaroxitaq/.

Step 5 and 6: phonotactics

Input: /xatanaroxitaq/

5. Apply consonant sandhi (here, voicing):

- xa**d**anaroxi**d**aq

6. Apply vowel reduction

- xadanarəxidaq

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